

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled)

Claim 2 (Previously Presented): The method of claim 3, further comprising:

forming a lift-off layer on a second substrate; and

growing the multilayer epitaxial film on the lift-off layer,

wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 3 (Previously Presented): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments;

transferring the segments to a first substrate; and

confining active regions in the respective segments on the first substrate so that the active regions form the array, wherein:

the confining includes implanting ion into the respective segments so as to enclose the active regions.

Claim 4 (Original): The method of claim 3, wherein:

a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 5 (Previously Presented): A method of making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

- separating the multilayer epitaxial film into a plurality of segments;
- transferring the segments to a first substrate; and
- confining active regions in the respective segments on the first substrate so that the active regions form the array, wherein:

- the confining includes etching areas other than the active regions in the respective segments.

Claim 6 (Previously Presented): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

- separating the multilayer epitaxial film into a plurality of segments;
- transferring the segments into a first substrate; and
- confining active regions in the respective segments on the first substrate so that the active regions form the array, wherein:

- the confining includes depositing contacts on the respective segments.

Claim 7 (Previously Presented): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

- separating the multilayer epitaxial film into a plurality of segments;
- adhering the plurality of segments on a tape; and
- extending the tape so as to widen pitches between the segments on the tape;
- transferring the segments to a first substrate; and

confining active regions in the respective segments on the first substrate so that the active regions form the array.

Claim 8 (Previously Presented): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

- separating the multilayer epitaxial film into a plurality of segments;
- adhering the plurality of segments on a first tape;
- extending the first tape so as to widen pitches between the segments on the first tape in a first direction;
- transferring the segments from the first tape to a second tape; and
- extending the second tape so as to widen pitches between the segments on the second tape in a second direction;
- transferring the segments to a first substrate; and
- confining active regions in the respective segments on the first substrate so that the active regions form the array.

Claim 9 (Original): The method of claim 7, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 10 (Original): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

- separating the multilayer epitaxial film into a plurality of segments;
- transferring the segments to a first substrate; and

implanting ions into the respective segments on the first substrate so as to confine active regions enclosed in areas to which the ions are implanted so that the active regions form the array.

Claim 11 (Previously Presented): The method of claim 10, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating step comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 12 (Original): The method of claim 10, wherein:
a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 13 (Original): The method of claim 10, further comprising:
adhering the multilayer epitaxial film on a tape; and
extending the tape so as to widen pitches between the segments on the tape.

Claim 14 (Original): The method of claim 10, further comprising:
adhering the multilayer epitaxial film on a first tape;
extending the first tape so as to widen pitches between the segments on the tape in a first direction;
transferring the segments from the first tape to a second tape; and

extending the second tape so as to widen pitches between the segments on the tape in a second direction.

Claim 15 (Original): The method of claim 13, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 16 (Original): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments;
transferring the segments to a first substrate; and
confining active regions in the respective segments on the first substrate so that the active regions form the array.

Claim 17 (Previously Presented): The method of claim 16, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 18 (Original): The method of claim 16, further comprising:
adhering the multilayer epitaxial film on a tape; and
extending the tape so as to widen pitches between the segments on the tape.

Claim 19 (Original): The method of claim 16, further comprising:
adhering the multilayer epitaxial film on a first tape;
extending the first tape so as to widen pitches between the segments on the tape in a first direction;
transferring the segments from the first tape to a second tape; and
extending the second tape so as to widen pitches between the segments on the tape in a second direction.

Claim 20 (Original): The method of claim 18, wherein an expanding rate of the tape is in a range of from 100 % to 500 %.

Claim 21 (Canceled).

Claim 22 (Previously Presented): The method of claim 5, further comprising:
forming a lift-off layer on a second substrate; and growing the multilayer epitaxial film on the lift-off layer,
wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 23 (Previously Presented): The method of claim 6, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,

wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 24 (Previously Presented): A method for making an array of opto-electronic devices from a multilayer epitaxial film, comprising:

separating the multilayer epitaxial film into a plurality of segments at a first pitch;
extending the first pitch to the second pitch which is wider than the first pitch;
transferring the segments to a first substrate at the second pitch; and
confining active regions in the respective segments on the first substrate so that the active regions form the array, after transferring the segments.

Claim 25 (Previously Presented): The method of claim 24, further comprising:
forming a lift-off layer on a second substrate; and
growing the multilayer epitaxial film on the lift-off layer,
wherein the separating comprises forming grooves on the multilayer epitaxial film so as to reach the lift-off layer and removing the lift-off layer whereby the epitaxial film is separated into the segments.

Claim 26 (Previously Presented): The method of claim 24, wherein:
the confining further comprises;
implanting ion into the respective segments so as to enclose the active regions.

Claim 27 (Previously Presented): The method of claim 26, wherein:

a dose of the ions is not less than 10^{-15} cm^{-2} .

Claim 28 (Previously Presented): The method of claim 24, wherein:
the confining further comprises;
etching areas other than the active regions in the respective segments.

Claim 29 (Previously Presented): The method of claim 24, wherein:
the confining further comprises;
depositing contacts on the respective segments.

Claim 30 (Previously Presented): The method of claim 24, wherein:
the extending includes adhering the plurality of segments on a first tape, and
expanding the tape so as to widen pitches between the segments on the tape.

Claim 31 (Previously Presented): The method of claim 24, wherein:
the extending includes adhering the plurality of segments on a first tape, expanding,
the first tape so as to widen pitches between the segments on the first tape in a first direction,
transferring the segments from the first tape to a second tam and expanding the second tape in
a second direction.

Claim 32 (Previously Presented): The method of claim 30, wherein an expanding
rate of the tape is in a range of from 100 % to 500 %.